CLAIMS

What is claimed is:

1. A method of treating primary cancer which comprises administering to a patient in need of such treatment a therapeutically effective amount of temozolomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, and a therapeutically effective amount of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

2. A method of treating metastatic cancer which comprises administering to a patient in need of such treatment a therapeutically effective amount of temozolomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, and a therapeutically effective amount of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

3. The method according to claim 1 or 2, wherein the cancer is primary malignant melanoma or metastatic melanoma.

4. The method according to claim 3, wherein the primary malignant melanoma is dermatological, ocular or mucosal.

5. The method according to claim 3, wherein the metastatic melanoma is of the skin, subcutaneous tissue, lymph nodes, lung, liver, spleen, adrenal gland, intestine, bone, brain, heart or kidney.

6. The method according to claim 3, further comprising administering a maintenance dose of thalidomide.

7. The method according to claim 6, wherein the maintenance dose of thalidomide is 50 to 200 mg/d.

8. The method according to claim 3, wherein the temozolomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 250 mg/m^2, and the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 1000 mg.

9. The method according to claim 8, wherein the temozolomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 200 mg/m^2, and the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 750 mg.

10. The method according to claim 9, wherein the temozolomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 200 mg/m^2, and the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 400 mg.

11. The method according to claim 1 or 2, wherein the temozolomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of about 75 mg/m^2/d.

12. The method according to claim 1 or 2, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered at an initial dose of from about 100 to about 200 mg/d.

13. The method according to claim 1 or 2, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered to patient over the age of 70 at an initial dose of from about 50 to about 100 mg/d.

14. The method according to claim 1 or 2, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered prior to the administration of the temozolomide.

15. The method according to claim 1 or 2, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered simultaneously with the administration of the temozolomide.

16. The method according to claim 1 or 2, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered after the administration of the temozolomide.

17. The method according to claim 1 or 2, wherein the thalidomide is administered daily and continuously.

18. The method according to claim 1 or 2, wherein the temozolomide is administered daily and continuously for 6 weeks followed by a rest period.

19. The method according to claim 1 or 2, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 1000 mg.

20. The method according to claim 1 or 2, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 400 mg.

21. The method according to claim 1 or 2, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 100 to about 200 mg.

22. A method of reducing or preventing an adverse effect associated with the administration of temozolomide, which comprises administering to a patient in need of such treatment or prevention an amount of temozolomide, or a pharmaceutically acceptable

prodrug, salt, solvate, hydrate, or clathrate thereof, and thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

23. The method according to claim 22, wherein the cancer is primary malignant melanoma or metastatic melanoma.

24. The method according to claim 23, wherein the primary malignant melanoma is dermatological, ocular or mucosal.

25. The method according to claim 23, wherein the metastatic melanoma is of the skin, subcutaneous tissue, lymph nodes, lung, liver, spleen, adrenal gland, intestine, bone, brain, heart or kidney.

26. The method according to claim 22, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered prior to the administration of the temozolomide.

27. The method according to claim 23, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered simultaneously with the administration of the temozolomide.

28. The method according to claim 22, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered after the administration of the temozolomide.

29. The method according to claim 22, wherein the adverse effect is alopecia, haematological toxicity, cardiovascular toxicity, neurological toxicity, gastrointestinal toxicityr, metabolic toxicity, pulmonary toxicity, dermatological toxicity, genitourinary toxicity or ophthalmic toxicity.

30. The method according to claim 29, wherein the adverse effect is leukopenia, lymphopenia, neutropenia, thrombocytopenia, anemia, paresthesia, somnolence, ataxia,

dysphasia, confusion, abdominal pain, anorexia, constipation, diarrhea, liver enzyme abnormalities, nausea, vomiting, asthenia, fatigue, headache, lethargy, skin rashes, erythematous, visual disturbances, dizziness, nausea, headache, loss of apetite, low blood sugar, high blood sugar and infection.

31. The method according to claim 22, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 1000 mg.

32. The method according to claim 31, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 50 to about 400 mg.

33. The method according to claim 32, wherein the thalidomide, or pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered in an amount of from about 100 to about 200 mg.

34. A method of increasing the therapeutic efficacy of temozolomide which comprises administering to a patient in need thereof an amount of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, that is sufficient to increase the therapeutic efficacy of the temozolomide.

35. The method according to claim 34, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered prior to administration of the temozolomide to the patient.

36. The method according to claim 34, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered during administration of the temozolomide to the patient.

37. The method according to claim 34, wherein the thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, is administered after administration of the temozolomide to the patient.

38. A kit for use in the treatment of cancer which comprises a dosage form of temozolomide or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, and a dosage form of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

39. The kit according to claim 38, further comprising a diagnostic assay to determine a patent's susceptibility to the treatment.

40. A pharmaceutical composition for treating or preventing primary or metastatic cancer comprising a therapeutically effective amount of temozolomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, and a therapeutically effective amount of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

41. A method of increasing the dosage of temozolomide that can be safely and effectively administered to a patient, which comprises administering to a patient in need of such an increased dosage an amount of thalidomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof, that is sufficient to reduce a dose-limiting adverse effect associated with the temozolomide.

42. The method according to claim 41, wherein the dose-limiting adverse effect is selected from the group consisting of alopecia, haematological toxicity, cardiovascular toxicity, neurological toxicity, gastrointestinal toxicityr, metabolic toxicity, pulmonary toxicity, dermatological toxicity, genitourinary toxicity or ophthalmic toxicity.

43. A method of reducing or preventing an adverse effect associated with the administration of thalidomide, which comprises administering to a patient in need of such treatment or prevention an amount of thalidomide, or a pharmaceutically acceptable

prodrug, salt, solvate, hydrate, or clathrate thereof, and temozolomide, or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or clathrate thereof.

44. The method of claim 43, wherein the adverse effect is birth defects, drowsiness, peripheral neuropathy or dermatological disorder.

45. The method of claim 43, wherein the adverse effect is constipation, dry mouth, dry skin, swelling of the face or limbs, increased appetite, nausea, nervousness, ear buzzing or addiction to thalidomide.